

# United States Patent [19]

## Spierings et al.

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[54] METHOD OF PHOTOLITHOGRAPHICALLY METALLIZING AT LEAST THE INSIDE OF HOLES ARRANGED IN ACCORDANCE WITH A PATTERN IN A PLATE OF AN ELECTRICALLY INSULATING MATERIAL

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[56]

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[51] Int. Cl.<sup>6</sup> ...... G03F 7/00

**U.S. Cl.** ...... 430/313; 430/318; 430/329

Field of Search ...... 430/311, 313, 430/318, 319, 323, 329

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ABSTRACT [57]

Method of photolithographically metallizing at least the inside of holes arranged in accordance with a pattern in a plate of an electrically insulating material.

A method of metallizing an electrically insulating plate, for example, of glass, having a large number of holes. Said holes are internally provided with a metal layer and the plate is provided with metal tracks. The metal used is mainly aluminium. The aluminium is coated with a thin protective layer of chromium, cobalt, nickel, zirconium or titanium. Said protective layer makes it possible to use a photosensitive, electrophoretic lacquer for providing the metal layer with a structure. The method can very suitably be used for the manufacture of selection plates for thin electron displays.

### 11 Claims, 1 Drawing Sheet

